

What Is Claimed Is:

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1 1. An intelligent service network, comprising:
2 a programmable switch; and
3 a switch controller coupled to said programmable switch.

1 2. The intelligent service network of claim 1, further comprising:
2 an intelligent service network component coupled to said switch
3 controller.

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1 3. The intelligent service network of claim 2, wherein said switch
2 controller comprises:
3 a programmable switch support means for providing an interface
4 to said programmable switch;
5 a call control means for establishing a connection between two
6 ports on said programmable switch; and
7 a service control means for interfacing with said intelligent service
8 network component.

1 4. The intelligent service network of claim 3, wherein said switch
2 controller further comprises:
3 a resource control means for allocating resources.

1 5. The intelligent service network of claim 3, wherein said switch
2 controller further comprises:
3 a management interface means for providing an interface to
4 external management systems.

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1 ~~6. The intelligent service network of claim 1, wherein said~~
2 ~~programmable switch is one of:~~

3 a programmable switch; or
4 a digital exchange.

1 7. The intelligent service network of claim 2, wherein said intelligent
2 service network component is one of:

3 a manual operator console;
4 an automated response unit;
5 a service switching control point; or
6 a protocol converter.

1 8. The intelligent service network of claim 2, wherein said intelligent
2 service network component is one of:

3 a means for access data; or
4 a means for interfacing with a caller.

1 9. The intelligent service network of claim 2, wherein said intelligent
2 service network component is one of:

3 a network information distribution system database coupled to said
4 switch controller via a network information distribution system server;
5 an applications database;
6 a data distribution system database; or
7 a mainframe database.

1 10. The intelligent service network of claim 2, further comprising:
2 a system management system coupled to said switch controller.

1 11. The intelligent service network of claim 1, further comprising:
2 a force management system coupled to said switch controller.

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1 17. A network, comprising:
2 a plurality of programmable switches; and

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1 22. The messaging interface of claim 20, further comprising:
2 a means for communicating with a force management system
3 using force management messages.

1 23. A method for setting up a call to an intelligent service network
2 component comprising the steps of:

3 (a) receiving by a switch controller from a programmable
4 switch a first programmable switch application programmer interface message to
5 request service indicating an initial address message was received from a public
6 switched telephone network;

7 (b) sending a second programmable switch application
8 programmer interface message to command a programmable switch to send an
9 address complete message to said public switched telephone network;

10 (c) sending a transmission control message to the intelligent
11 service network component;

12 (d) receiving a transmission control response message from the
13 intelligent service network component;

14 (e) sending a third programmable switch application
15 programmer interface message to said programmable switch requesting sending
16 of an answer message to said public switched telephone network; and

17 (f) sending a fourth programmable switch application
18 programmer interface message to said programmable switch requesting
19 connection of a circuit.

1 24. The method of claim 23, further comprising the following steps
2 performed before step (a):

3 receiving by an originating switch controller from an originating
4 programmable switch a first originating programmable switch application

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5 programmer interface message to request service indicating an initial address
6 message was received from a public switched telephone network;
7 determining that said originating switch controller cannot select
8 the intelligent service network component; and
9 obtaining an intermachine trunk facility between said originating
10 programmable switch and said programmable switch.

1 25. A method for setting up a call originated via a public switched
2 telephone network to an intelligent service network component, comprising the
3 steps of:

4 receiving a request for facilities to provide service for the call;
5 selecting by a switch controller the intelligent service network
6 component;
7 commanding by said switch controller a programmable switch to
8 provide connections and signal to a public switched telephone network to connect
9 the call to the intelligent service network component; and
10 sending by said switch controller a call offered signal to the
11 intelligent service network component.

1 26. A method for connecting a call from an intelligent service network
2 component to a terminating party via a public switched telephone network,
3 comprising the steps of:

4 receiving by a switch controller from the intelligent service
5 network component a request to connect the call to the terminating party
6 indicating a type of the call;
7 commanding a programmable switch to attain facilities via the
8 public switched telephone network to the terminating party; and
9 receiving from said programmable switch a message indicating
10 that said facilities have been obtained.

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1 27. A method for disconnecting a call established between a public
2 switched telephone network and an intelligent service network component,
3 comprising the steps of:

4 receiving by a switch controller a termination signal obtained from
5 a calling device interconnected to the public switched telephone network
6 indicating that the call is being terminated;

7 notifying the intelligent service network component that the
8 established call is being terminated; and

9 commanding by a switch controller a programmable switch to
10 release the call.

1 28. The method of claim 27, further comprising the steps of:

2 commanding said programmable switch to park channels
3 associated with an originating party and the intelligent service network
4 component;

5 sending the intelligent service network component a call offered
6 message indicating a reorigination request was received from the public switched
7 telephone network; and

8 commanding said programmable switch to connect the originating
9 party and the intelligent service network component;

10 wherein said termination signal is a reorigination signal.

1 29. A method for transferring a call connected between a public
2 switched telephone network and a first intelligent service network component
3 from the first intelligent service network component to a second intelligent
4 service network component, comprising the steps of:

5 receiving from the first intelligent service network component a
6 request to transfer the call;

7 commanding a programmable switch to park the channel of the
8 call while the call is being transferred;

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